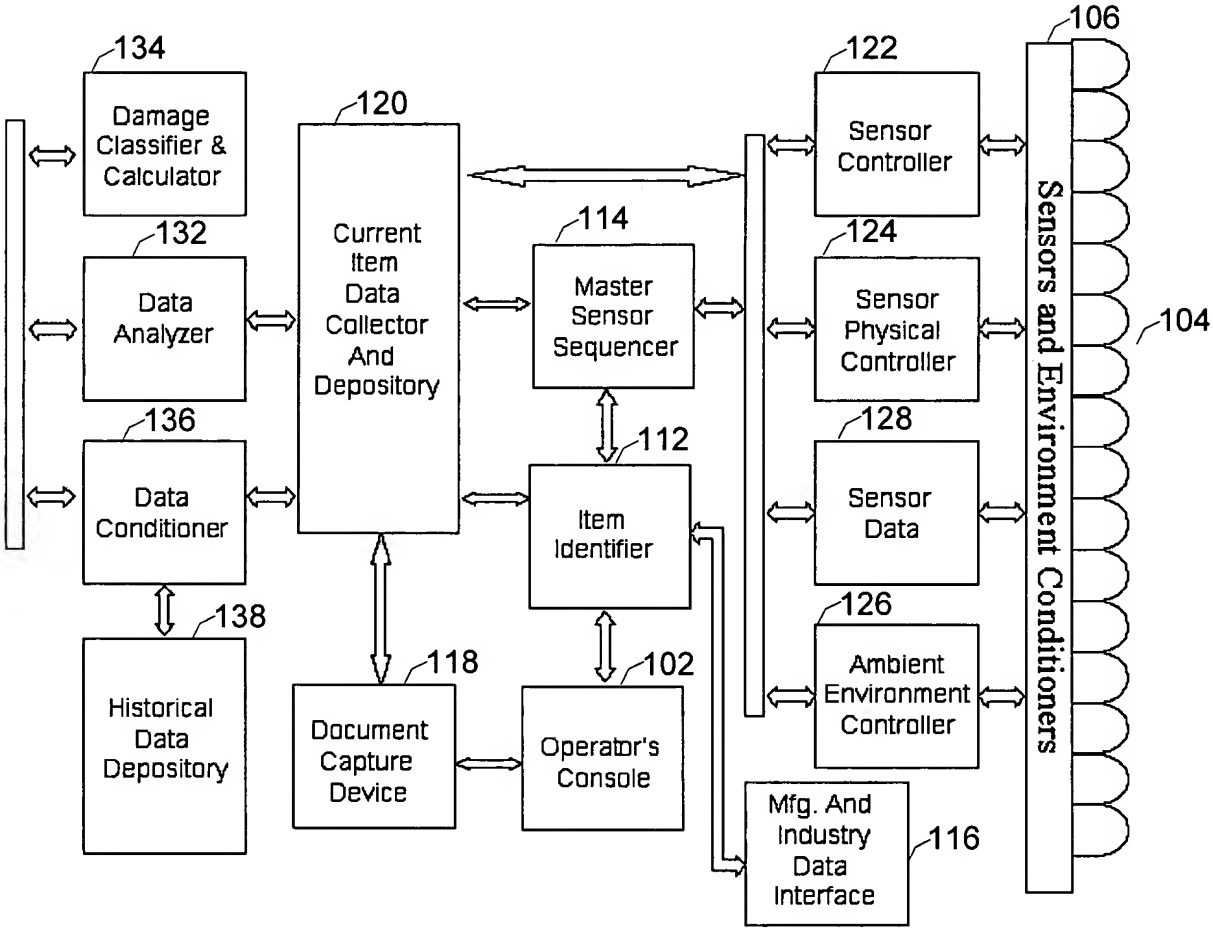
134
Damage Classifier & Calculator
132
Data Analyzer
136
Data Conditioner
138
Historical Data Depository
120
Current Item Data Collector And Depository
118
Document Capture Device
114
Master Sensor Sequencer
112
Item Identifier
102
Operator's Console
122
Sensor Controller
124
Sensor Physical Controller
128
Sensor Data
126
Ambient Environment Controller
Mfg. And Industry Data Interface
116
106
Sensors and Environment Conditioners
104

Fig. 1

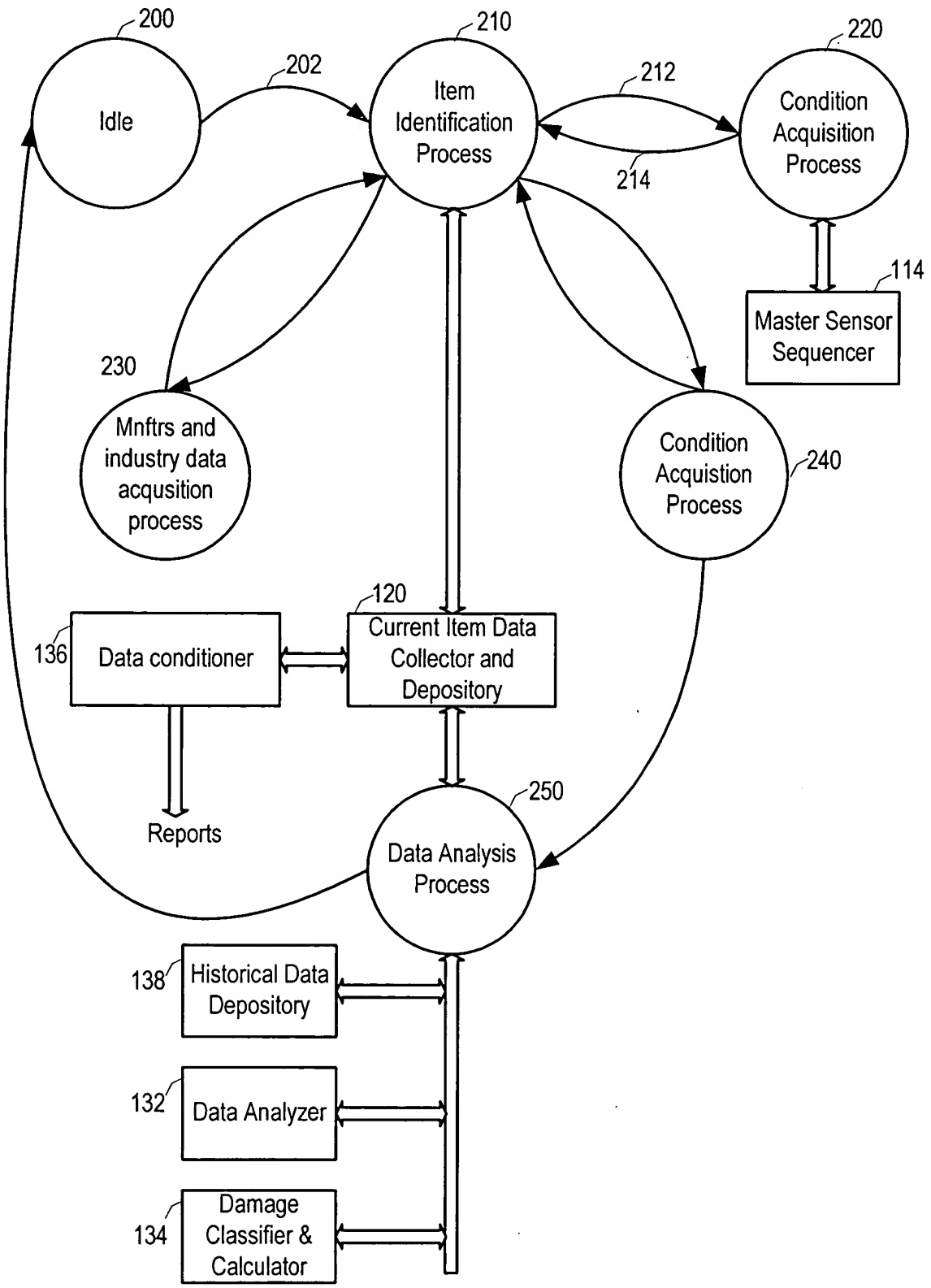
200
Idle
202
210
Item Identification Process
212
214
220
Condition Acquisition Process
114
Master Sensor Sequencer
230
Mnftrs and industry data acqusition process
Condition Acquistion Process
240
120
136
Data conditioner
Current Item Data Collector and Depository
Reports
250
Data Analysis Process
138
Historical Data Depository
132
Data Analyzer
134
Damage Classifier & Calculator

Fig. 2

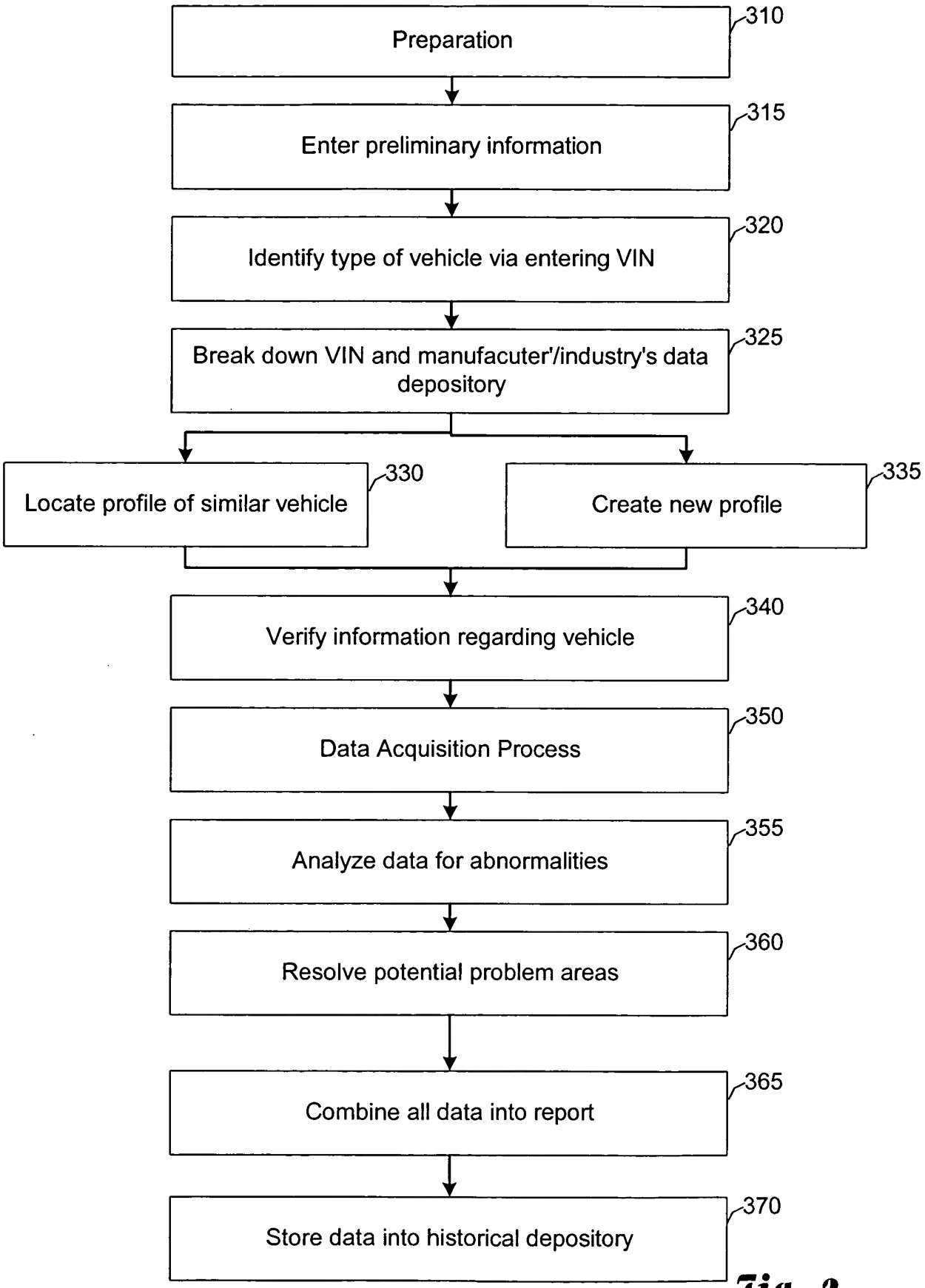
Preparation
310
Enter preliminary information
315
Identify type of vehicle via entering VIN
320
Break down VIN and manufacuter'/industry's data depository
325
Locate profile of similar vehicle
330
Create new profile
335
Verify information regarding vehicle
340
Data Acquisition Process
350
Analyze data for abnormalities
355
Resolve potential problem areas
360
Combine all data into report
365
Store data into historical depository
370

Fig. 3

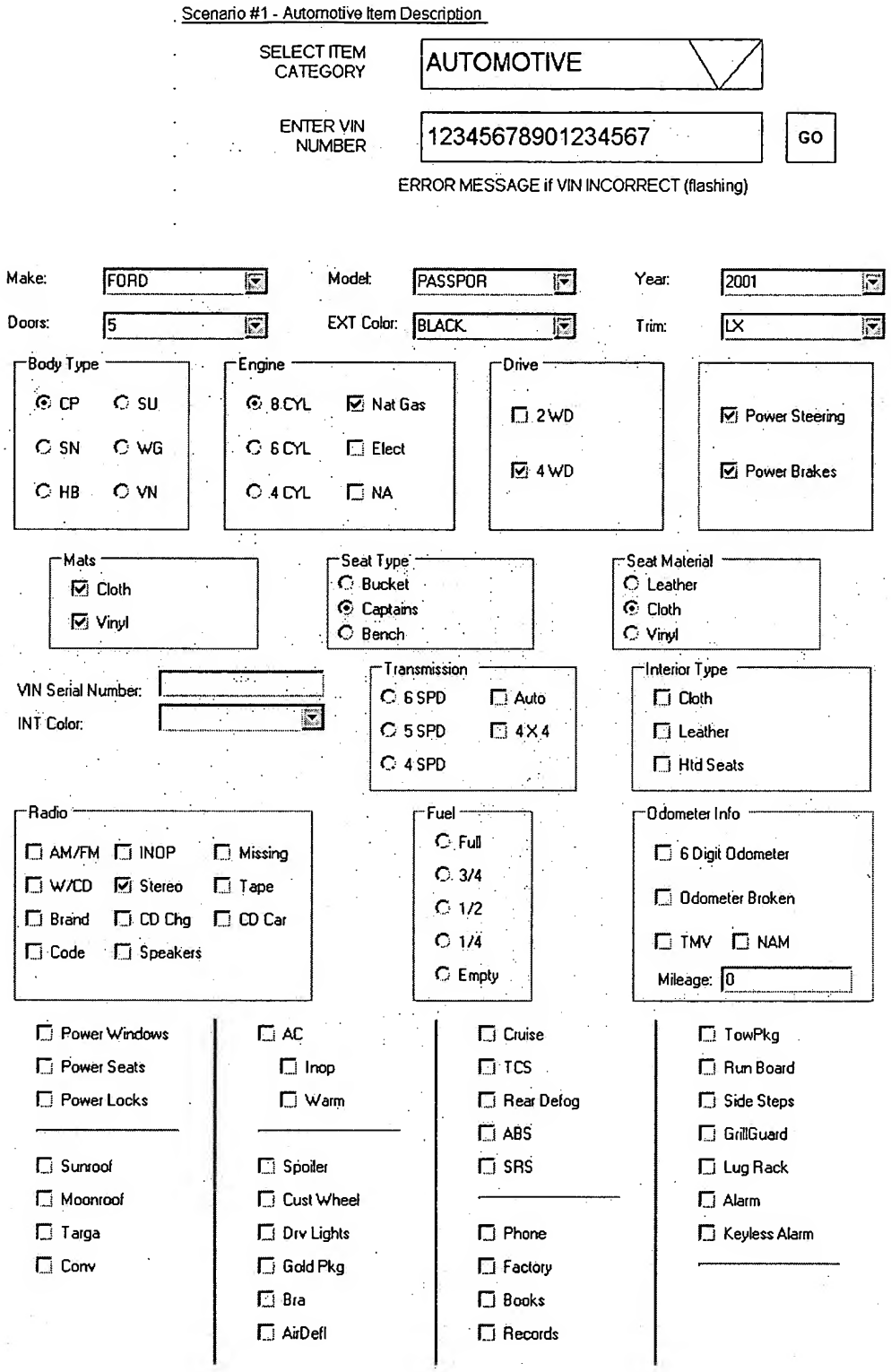
Scenario #1 - Automotive Item Description
SELECT ITEM CATEGORY
AUTOMOTIVE
ENTER VIN NUMBER
12345678901234567
GO
ERROR MESSAGE if VIN INCORRECT (flashing)
Make: FORD
Model: PASSPOR
Year: 2001
Doors: 5
EXT Color: BLACK
Trim: LX
Body Type
CP SU
SN WG
HB VN
Engine
8 CYL Nat Gas
6 CYL Elect
4 CYL NA
Drive
2 WD
4 WD
Power Steering
Power Brakes
Mats
Cloth
Vinyl
Seat Type
Bucket
Captains
Bench
Seat Material
Leather
Cloth
Vinyl
VIN Serial Number:
INT Color:
Transmission
6 SPD Auto
5 SPD 4 X 4
4 SPD
Interior Type
Cloth
Leather
Htd Seats
Radio
AM/FM INOP Missing
W/CD Stereo Tape
Brand CD Chg CD Car
Code Speakers
Fuel
Full
3/4
1/2
1/4
Empty
Odometer Info
6 Digit Odometer
Odometer Broken
TMV NAM
Mileage: 0
Power Windows
Power Seats
Power Locks
Sunroof
Moonroof
Targa
Conv
AC
Inop
Warm
Spoiler
Cust Wheel
Drv Lights
Gold Pkg
Bra
AirDefl
Cruise
TCS
Rear Defog
ABS
SRS
Phone
Factory
Books
Records
TowPkg
Run Board
Side Steps
GrillGuard
Lug Rack
Alarm
Keyless Alarm

Fig. 4A

Scenario #2 - Heavy Equipment Description

SELECT ITEM CATEGORY: HEAVY EQUIPMENT

ENTER SERIAL NUMBER: 123456789012 GO

ERROR MESSAGE if S/N INCORRECT (flashing)

MAKE: CATERPILLAR MODEL: 924G

CHECK ALL FEATURES/OPTIONS THAT APPLY

- ☐ 3056 ENGINE
- ☐ CAB, with AIR CONDITIONER
- ☐ DIFFERENTIAL, LIMITED SLIP, FRNT
- ☐ LINES, FRONT
- ☐ TIRES, 20.5-R25 XTLA*L2
- ☐ SUN VISOR, FRONT
- ☐ BUCKET, 2.6 CYD (HO)
- ☐ AM/FM CASSETTE RADIO
- ☐ LINKAGE, STANDARD
- ☐ SEAT, CONTOUR/AIR SUSPENSION
- ☐ DIFFERENTIAL, LIMITED SLIP, REAR
- ☐ OIL COOLER, HYDRAULIC
- ☐ GUARD, CRANKCASE
- ☐ SUN SCREEN , REAR
- ☐ COUPLER
- ☐ AIR CONDITIONER
- ☐ FENDERS, STANDARD
- ☐ DOORS, CAB, SLIDING GLASS
- ☐ PRECLEANER, DUST BOWL
- ☐ INSTRUCTIONS, ENGLISH
- ☐ GUARD, POWERTRAIN
- ☐ HEATER, ENGINE COOLANT, 120V
- ☐ CUTTING EDGE, BOLT ON (4 PIECE)
- ☐ EROPS
- ☐ ALTERNATOR, HIGH OUTPUT, 70AMP
- ☐ TRANSMISSION, STANDARD
- ☐ HYDRAULICS; 3 VALVE, 2 LEVER, FNR
- ☐ LIGHTS, AUX, FRONT
- ☐ INSTALLATION GROUP, RADIO 12V
- ☐ COUNTERWEIGHT, EXTRA
- ☐ RIDE CONTROL
- ☐ 3RD VALVE

☐ ADD A FEATURE OR OPTION NOT LISTED ABOVE

Fig. 4B

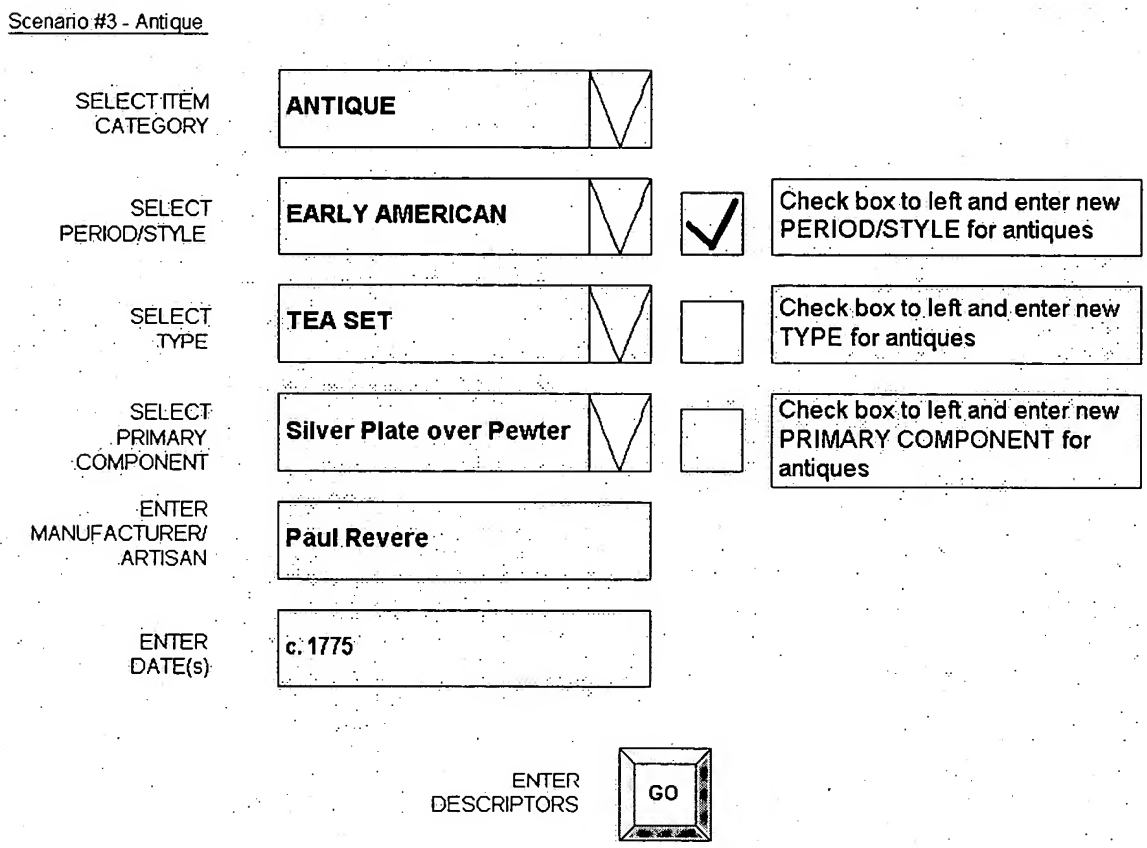
Scenario #3 - Antique
SELECT ITEM CATEGORY
ANTIQUE
SELECT PERIOD/STYLE
EARLY AMERICAN
Check box to left and enter new PERIOD/STYLE for antiques
SELECT TYPE
TEA SET
Check box to left and enter new TYPE for antiques
SELECT PRIMARY COMPONENT
Silver Plate over Pewter
Check box to left and enter new PRIMARY COMPONENT for antiques
ENTER MANUFACTURER/ ARTISAN
Paul Revere
ENTER DATE(s)
c. 1775
ENTER DESCRIPTORS
GO

Fig. 4C

Sample New Item Test Selection Screen

list below the desired sensors to analyze for all future items of this type.

	Sequence	Sensor Test Type
☐	☐	Acoustical
☐	☐	Electrical
☐	☐	Electromagnetic fields
☐	☐	Emissions
☐	☐	Engine compression
☐	☐	Fluid levels
☐	☐	Image
☐	☐	Impedance
☐	☐	Infrared
☐	☐	Internal systems self diagnosis
☐	☐	Leaks
☐	☐	Luminance
☐	☐	Magnetic
☐	☐	Mechanical (doors, trunk, hood opening etc.)
☐	☐	Radar
☐	☐	Radiation
☐	☐	Resonance
☐	☐	Smell
☐	☐	Sonar
☐	☐	Surface smoothness
☐	☐	Surface thickness (body, interior, tires, etc.)
☐	☐	Surface type
☐	☐	Tension/reflectiveness (body, roof, etc.)
☐	☐	Thermal
☐	☐	Transparency (windows, windshields)
☐	☐	Vibration
☐	☐	Weight

Fig. 5